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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,819	06/13/2005	Yoshitsugu Morita	71051-010	5680
27305 7590 06/21/2007 HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			EXAMINER LOEWE, ROBERT S	
			ART UNIT 1709	PAPER NUMBER
			MAIL DATE 06/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/538,819	MORITA ET AL.	
	Examiner	Art Unit	
	Robert Loewe	1709	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/13/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

Claim 4: Claim 4 is objected to because of the following informalities: The typo "are" should be changed to --area--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The applicant has failed to incorporate a foreign test standard in the specification.

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f). See also *In re Hawkins*, 486 F.2d 569, 179 USPQ 157; *In re Hawkins*, 486 F.2d 579, 179 USPQ 163; *In re Hawkins*, 486 F.2d 577, 179 USPQ 167.

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In order to avoid a 35 U.S.C. 112, first paragraph rejection when the applicant attempts to incorporate a foreign test standard in the specification (6:17-20 and reference examples 1-3) it is recommended that the applicant further incorporates the standard in the specification or submit an English translation of the standard.

Claims 1-20 are rejected under 35 U.S.C., 112, first paragraph, for the reasons set forth above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, and 9-20 are rejected under 35 U.S.C. 103(a) as being obvious over Morita (US Pat. 5,945,471; herein referred to as reference '471) in view of Morita (US Pat. 5,387,624; herein referred to as reference '624).

Claim 1: Reference '471 teaches a composite cured silicone powder having an average particle size of 0.1 to 500 microns (1:57-62). Reference '471 further teaches an inorganic powder coated on the surface of the cured silicone powder (1:66-2:1). Reference '471 further teaches the preparation of cured silicone rubber powders from aqueous dispersions of polysiloxanes and polyoxyethylenenonylphenyl ether (reference examples 1-3) and further teaches mixing the cured silicone rubber powders with inorganic fine powders (application and comparison examples).

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Reference '471 does not explicitly teach a surface-active agent which is coated to the inorganic fine powder. However, reference '624 teaches a water-based emulsion of a curable liquid silicone composition (preferably containing a surfactant/surface-active agent), and an inorganic micropowder which is then cured (3:46-49). A surfactant is a blend of **surface-active agents**. For purposes of examination, the terms surfactant and surface-active agent are equivalent. References '471 and '624 are combinable because they are concerned with a similar technical difficulty, namely, the preparation of cured silicone powders. At the time of invention, a person of ordinary skill in the art would have found it obvious to add a surfactant to the cured silicone powder composition of reference '471 and would have been motivated to do so since reference '624 teaches that the introduction of surfactants to the cured silicone/inorganic microparticle mixtures afford materials having excellent stability and smaller particle sizes (3:66-4:5).

Claim 2: Reference '471 teaches mixing by means of mechanical shear (1:57-62).

Claim 3: Reference '471 teaches metal oxide inorganic micropowders (5:24-36).

Claim 4: Reference '471 teaches specific surface areas of not less than  $10 \text{ m}^2/\text{g}$  (5:42-43).

Claim 5: Reference '471 teaches silica as inorganic fine powder (5:26).

Claim 6: Reference '471 teaches silicone rubber powder (2:13).

Claims 9-12 and 20: Reference '471 teaches aqueous compositions comprising composite cured silicone powders (Table 1, water repellency and 5:6).

Claim 13: Reference '471 does not teach a surface-active agent coated onto the inorganic powder and does not teach that the relative particle diameters of the inorganic powder with respect to the cured silicone powder. However, reference '624 teaches the addition of a surface-

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active agent in the preparation of a composite cured silicone powder (3:66-4:31). Reference '624 further teaches metal oxide particles having diameters equal to or less than 1/10 that of the cured silicone powders (3:2-7). References '471 and '624 are combinable because they are concerned with a similar technical difficulty, namely, the preparation of cured silicone powders. Further, a person having ordinary skill in the art would have found it obvious at the time the invention was made to utilize the particle dimensions in the ratios taught by reference '624 in the composite cured silicone powders taught by reference '471 and would have been motivated to do so since the '624 reference states that proper adjustment of particle diameters "affords a powder mixture with a particularly good flowability" (3:7-9).

Claim 14: Reference '471 teaches methods of curing the silicone powder (2:14-18).

Claim 15: Reference '471 teaches a JIS A durometer hardness equal to or less than 90 (2:22-24).

Claim 16: Reference '471 teaches a silicone gel powder and a silicone resin powder (2:11-14).

Claim 17: Reference '471 teaches PDMS (polydimethylsiloxane) cured by addition reaction (3:62-67).

Claim 18: Reference '471 teaches non-crosslinking oils (2:25-3:30).

Claim 19: Reference '471 teaches non-crosslinking silicone oils and non-crosslinking organic oils (2:25-3:30).

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being obvious over Morita (US Pat. 5,945,471; herein referred to as reference '471) in view of Morita (US Pat. 5,387,624; herein referred to as reference '624).

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Claims 7 and 8: Reference '471 teaches a method for preparing a composite cured silicone powder comprising mixing a cured silicone powder with a microfine inorganic powder under mechanical shear (1:57-62 and 5:44-58).

Reference '471 does not teach that the method includes mixing in a surface-active agent under mechanical shear. However, reference '624 teaches the addition of a surface-active agent in the preparation of a composite cured silicone powder (3:66-4:31). References '471 and '624 are combinable because they are concerned with a similar technical difficulty, namely, the preparation of composite cured silicone powders. At the time of invention, a person of ordinary skill in the art would have found it obvious to include a surfactant in the method of preparing a composite cured silicone powder taught by reference '471 and would have been motivated to do so since reference '624 teaches that the introduction of surfactants to the cured silicone/inorganic microparticle mixtures afford materials having excellent stability and smaller particle sizes (3:66-4:5). Further, because a person of ordinary skill in the art would have found it obvious to add a surfactant to the cured silicone powder composition of reference '471 (*vide supra*), it follows that mixing the above components under mechanical shear can occur prior to (instant claim 8) or after (instant claim 7) addition of surface-active agent.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571) 272-1197. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RSL  
23-May-2007



**MARK EASHOO, PH.D**  
**PRIMARY EXAMINER**

11 - Jun - 07